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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/640,735	08/17/2000	Willem Johannes Van Den Bogert	PHNL 000358	4814

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER

ROY, SIKHA

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 07/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/640,735

Applicant(s)

VAN DEN BOGERT ET AL.

Examiner

Sikha Roy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,5,8-11 and 13-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-21 is/are allowed.
- 6) ☒ Claim(s) 1,2,5,8-11 and 13 is/are rejected.
- 7) ☒ Claim(s) 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 29, 2003 has been entered.

New claims 19-21 and cancellation of claims 3,4,6 and 12 have been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2,5,7-11,13,14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 3,548,241 to Rasch et al. in view of U.S. Patent 6,043,603 to Weinhardt.

Regarding claim 1 Rasch et al. disclose (column 3 lines 50-73, Fig.1) a low pressure mercury vapor discharge lamp 10 comprising a tubular discharge vessel 11 enclosing a discharge space in a gastight manner with tubular end portions having longitudinal axis, electrodes 18 arranged in the discharge space for generating and maintaining discharge, main amalgam 22 disposed for controlling the mercury pressure during operation and an auxiliary amalgam 20 provided on a carrier (metal cap 19

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arranged in a plane transverse to the longitudinal axis) in the discharge vessel in the proximity of the electrode 18 which heats up faster and provides sufficient mercury vapor during start-up period (column 1 lines 65-72).

Claim 1 differs from Rasch et al. in that Rasch et al. do not exemplify the auxiliary amalgam extending substantially planar in two mutually orthogonal directions, transverse to the longitudinal axis and disposed in line with the electrode in a direction parallel with the longitudinal axis.

Weinhardt in analogous art of low pressure discharge lamp discloses (column 3 lines 1-5, column 4 lines 1-35 Fig. 1) amalgam 13 provided on a carrier 12 (flat metal plate) aligned with plane perpendicular to the longitudinal axis, the amalgam coated on the flat plate extending substantially in two mutually orthogonal directions transverse to the longitudinal axis. Weinhardt further discloses (column 2 lines 50-55) that this metal plate demands less space than a ring cap and is particularly suitable for low pressure discharge lamp.

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the ring cap 19 containing auxiliary amalgam of the discharge lamp of Rasch by the carrier comprising flat metal plate and amalgam coated on the flat plate extending substantially in two mutually orthogonal directions transverse to the longitudinal axis as taught by Weinhardt for the benefit of the carrier demanding less space than a ring cap and hence particularly suitable for low pressure discharge lamp. The limitation reciting the vessel containing mercury and inert gas is considered to be inherent to a low pressure mercury vapor discharge lamp.

Regarding claim 2 Rasch in view of Weinhardt disclose a stem in the tubular end portion carrying the electrode and the carrier being provided on a supporting body arranged in the stem.

Regarding claim 5 Rasch discloses (column 3 lines 68,69)the supporting body formed by a wire.

Referring to claim 7 it is clearly evident from Fig.3 of Weinhardt that the carrier is arranged at a side of the electrode facing away from the discharge space.

Regarding claim 8 Rasch and Weinhardt disclose the carrier supported by fastening wire in the glass stem and hence is insulated with respect to the electrodes.

Regarding claim 9 Rasch and Weinhardt disclose the claimed invention except for the carrier comprising a part arranged in a plane parallel to the longitudinal axis. It would have been obvious matter of design choice to have the carrier comprising a part arranged in a plane parallel to the longitudinal axis since the applicant has not disclosed that this part of the carrier solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with carrier having just the planar part transverse to the longitudinal axis.

Regarding claims 10 and 11, Rasch and Weinhardt disclose the claimed invention except for the limitation of the distance  $d$  between the carrier and the electrode lying in the range from  $0.5 < d < 8$  mm. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the range of the

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distance between the carrier and the electrode from  $0.5 < d < 8$  mm, since optimization of workable ranges is considered within the skill of the art.

Claim 13 essentially recites the same limitations as of claims 8 and 9 and hence is rejected for the same reason.

***Allowable Subject Matter***

Claims 15,16-21 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

Regarding claim 15 the Prior art of record neither shows nor suggests a low pressure mercury vapor discharge lamp having all the limitations as claimed in claim 15, particularly having the carrier provided on the external surface of the supporting body formed by the exhaust tube extending partially into the discharge space.

Regarding claim 16 the Prior art of record neither shows nor suggests a low pressure mercury vapor discharge lamp having all the limitations as claimed in claim 16, particularly having the carrier of amalgam press-fitted onto the end portion of the exhaust tube situated in the discharge space.

Claims 17 – 21 are allowable for the reason given for claim 16 because of their dependency status from claim 16.

Claim 14 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record neither shows nor suggests a low pressure discharge lamp having all the limitations as claimed in claim 14 and particularly the limitation comprising the carrier containing the auxiliary amalgam directly press-fitted onto the stem.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 01186544 A to Misono et al. discloses amalgam sealed type mercury vapor discharge lamp where the amalgam is provided to a member electrically insulated from the electrode.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (703) 308-2826. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (703) 305-4794. The fax phone number for the organization is (703) 308-7382.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

S.R.  
Sikha Roy  
Patent Examiner  
Art Unit 2879

  
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